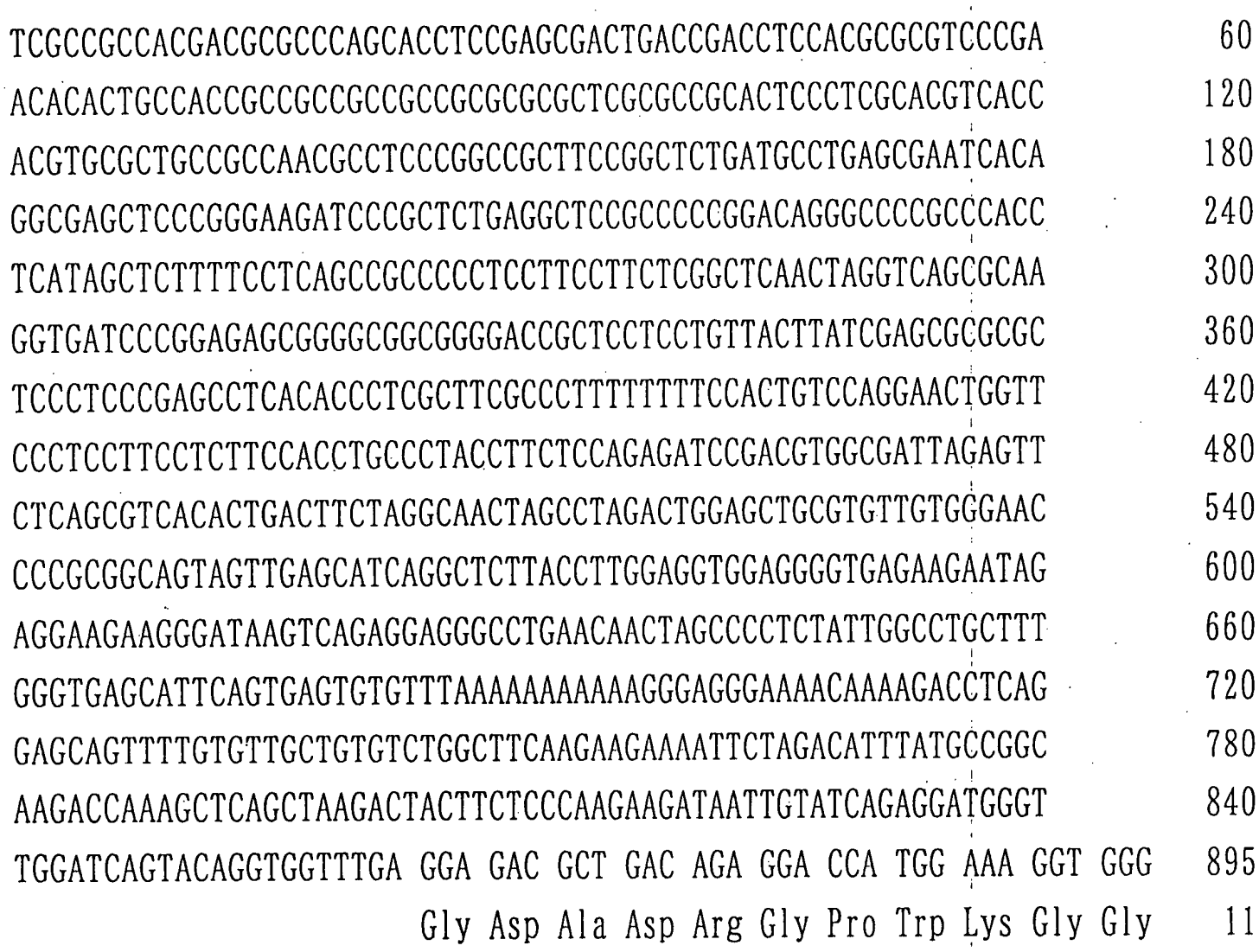

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GGCGAGCTCCCGGGAAGATCCCGCTCTGAGGCTCCGCCCCCGGACAGGGCCCCGCCCACC     240
TCATAGCTCTTTTCCTCAGCCGCCCCCTCCTTCCTTCTCGGCTCAACTAGGTCAGCGCAA     300
GGTGATCCCGGAGAGCGGGGCGGCGGGGACCGCTCCTCCTGTTACTTATCGAGCGCGCGC     360
TCCCTCCCGAGCCTCACACCCTCGCTTCGCCCTTTTTTTTCCACTGTCCAGGAACTGGTT     420
CCCTCCTTCCTCTTCCACCTGCCCTACCTTCTCCAGAGATCCGACGTGGCGATTAGAGTT     480
CTCAGCGTCACACTGACTTCTAGGCAACTAGCCTAGACTGGAGCTGCGTGTTGTGGGAAC     540
CCCGCGGCAGTAGTTGAGCATCAGGCTCTTACCTTGGAGGTGGAGGGGTGAGAAGAATAG     600
AGGAAGAAGGGATAAGTCAGAGGAGGGCCTGAACAACTAGCCCCTCTATTGGCCTGCTTT     660
GGGTGAGCATTCAGTGAGTGTGTTTAAAAAAAAAAAGGGAGGGAAAACAAAAGACCTCAG     720
GAGCAGTTTTGTGTTGCTGTGTCTGGCTTCAAGAAGAAAATTCTAGACATTTATGCCGGC     780
AAGACCAAAGCTCAGCTAAGACTACTTCTCCCAAGAAGATAATTGTATCAGAGGATGGGT     840
TGGATCAGTACAGGTGGTTTGA GGA GAC GCT GAC AGA GGA CCA TGG AAA GGT GGG  895
                       Gly Asp Ala Asp Arg Gly Pro Trp Lys Gly Gly   11
```

Fig. 1

Fig. 2

```
AGA GGA CGC GCG GCT CCT GGG CTT CCT CTG AGC TCA GCT CCA GGC ACC ACA  946
Arg Gly Arg Ala Ala Pro Gly Leu Pro Leu Ser Ser Ala Pro Gly Thr Thr   28
AGG CCA CAT AAG GAG GGT GAG GTC CCT GGA GTG GAC TAC ATT TTC ATA ACC  997
Arg Pro His Lys Glu Gly Glu Val Pro Gly Val Asp Tyr Ile Phe Ile Thr   45
GTT GAG GAG TTT ATG GAA TTG GAG AAA AGT GGT GCT CTC CTA GAA AGC GGG 1048
Val Glu Glu Phe Met Glu Leu Glu Lys Ser Gly Ala Leu Leu Glu Ser Gly   62
ACC TAT GAA GAC AAC TAC TAC GGT ACC CCG AAG CCT CCA GCT GAA CCA GCA 1099
Thr Tyr Glu Asp Asn Tyr Tyr Gly Thr Pro lys Pro Pro Ala Glu Pro Ala   79
CCA TTA TTA AAT GTA ACA GAC CAG ATA CTT CCG GGA GCT ACT CCA AGT GCT 1150
Pro Leu Leu Asn Val Thr Asp Gln Ile Leu Pro Gly Ala Thr Pro Ser Ala   96
GAG GGG AAG CGG AAA AGA AAT AAG TCA GTG ACC AAC ATG GAG AAA GCA AGT 1201
Glu Gly Lys Arg Lys Arg Asn Lys Ser Val Thr Asn Met Glu Lys Ala Ser  113
ATA GAG CCT CCA GAG GAA GAA GAA AGG CCT GTA GTC AAT GGA AAC 1252
Ile Glu Pro Pro Glu Glu Glu Glu Arg Pro Val Val Asn Gly Asn  130
GGC GTG GTC ATA ACC CCA GAA TCC AGT GAA CAT GAA GAC AAA AGT GCA GGT 1303
Gly Val Val Ile Thr Pro Glu Ser Ser Glu His Glu Asp Lys Ser Ala Gly  147
```

Fig. 3

```
GCC TCA GGG GAG ACA CCC TCC CAG CCT TAC CCT GCA CCC GTG TAC AGC CAG 1354
Ala Ser Gly Glu Thr Pro Ser Gln Pro Tyr Pro Ala Pro Val Tyr Ser Gln  164
CCC GAA GAG CTC AAG GAC CAG ATG GAC GAT ACA AAG CCA ACA AAG CCT GAG 1405
Pro Glu Glu Leu Lys Asp Gln Met Asp Asp Thr Lys Pro Thr Lys Pro Glu  181
GAG AAC GAG GAC TCT GAT CCA TTG CCT GAT AAC TGG GAA ATG GCC TAC ACA 1456
Glu Asn Glu Asp Ser Asp Pro Leu Pro Asp Asn Trp Glu Met Ala Tyr Thr  198
GAG AAG GGG GAA GTC TAC TTC ATT GAC CAT AAC ACA AAG ACA ACA TCA TGG 1507
Glu Lys Gly Glu Val Tyr Phe Ile Asp His Asn Thr Lys Thr Thr Ser Trp  215
CTG GAT CCG CGA CTT GCG AAA AAG GCT AAA CCT CCA GAA GAG TGC AAA GAA 1558
Leu Asp Pro Arg Leu Ala Lys Lys Ala Lys Pro Pro Glu Glu Cys Lys Glu  232
AAT GAG CTT CCA TAT GGC TGG GAA AAA ATC GAT GAT CCT ATA TAT GGC ACT 1609
Asn Glu Leu Pro Tyr Gly Trp Glu Lys Ile Asp Asp Pro Ile Tyr Gly Thr  249
TAC TAT GTT GAC CAC ATA AAT AGA AGA ACA CAG TTT GAA AAC CCT GTC CTG 1660
Tyr Tyr Val Asp His Ile Asn Arg Arg Thr Gln Phe Glu Asn Pro Val Leu  266
GAA GCA AAA AGG AAG CTA CAG CAA CAT AAC ATG CCC CAC ACA GAA CTT GGA 1711
Glu Ala Lys arg Lys Leu Gln Gln His Asn Met Pro His Thr Glu Leu Gly  283
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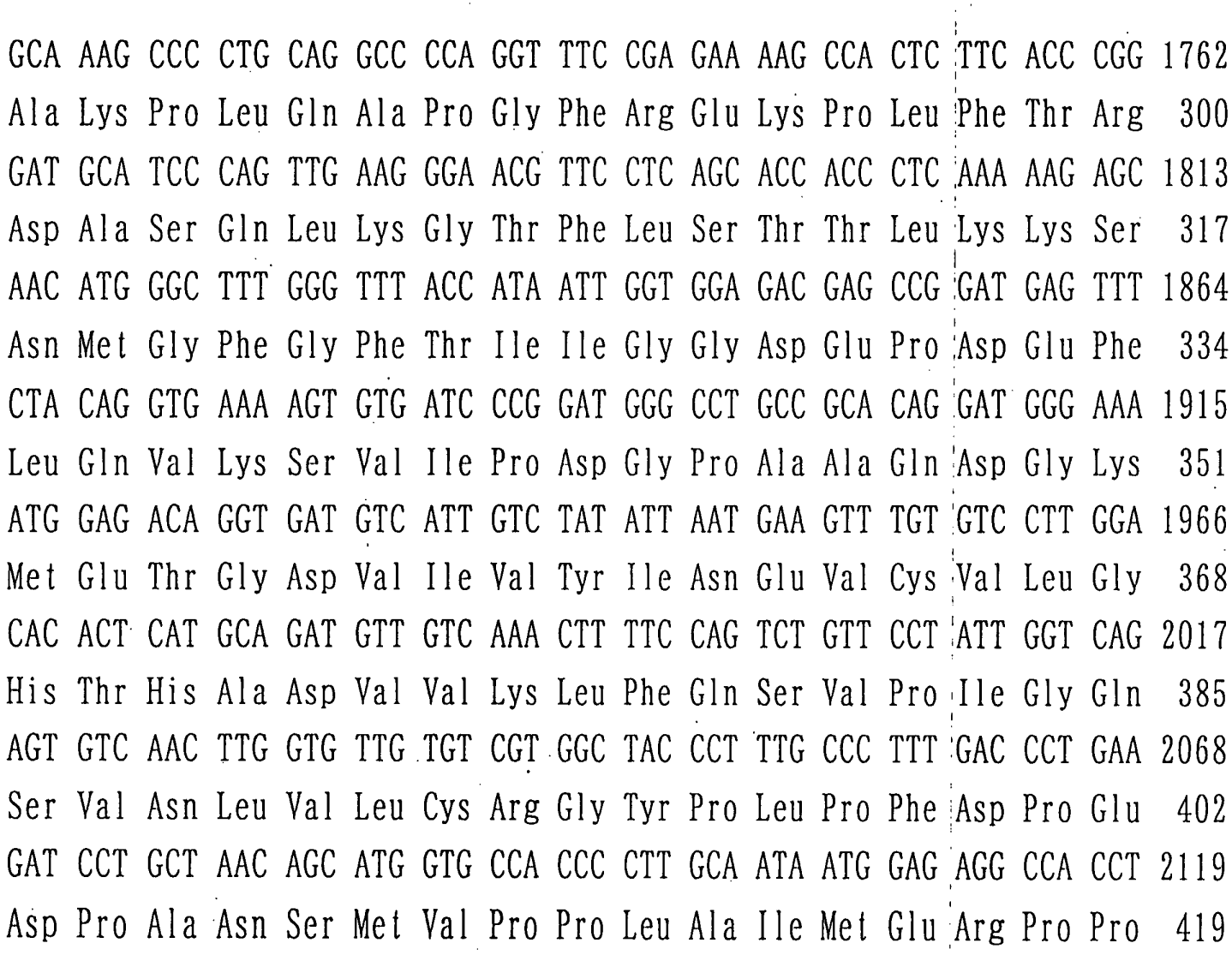

GCA	AAG	CCC	CTG	CAG	GCC	CCA	GGT	TTC	CGA	GAA	AAG	CCA	CTC	TTC	ACC	CGG	1762
Ala	Lys	Pro	Leu	Gln	Ala	Pro	Gly	Phe	Arg	Glu	Lys	Pro	Leu	Phe	Thr	Arg	300
GAT	GCA	TCC	CAG	TTG	AAG	GGA	ACG	TTC	CTC	AGC	ACC	ACC	CTC	AAA	AAG	AGC	1813
Asp	Ala	Ser	Gln	Leu	Lys	Gly	Thr	Phe	Leu	Ser	Thr	Thr	Leu	Lys	Lys	Ser	317
AAC	ATG	GGC	TTT	GGG	TTT	ACC	ATA	ATT	GGT	GGA	GAC	GAG	CCG	GAT	GAG	TTT	1864
Asn	Met	Gly	Phe	Gly	Phe	Thr	Ile	Ile	Gly	Gly	Asp	Glu	Pro	Asp	Glu	Phe	334
CTA	CAG	GTG	AAA	AGT	GTG	ATC	CCG	GAT	GGG	CCT	GCC	GCA	CAG	GAT	GGG	AAA	1915
Leu	Gln	Val	Lys	Ser	Val	Ile	Pro	Asp	Gly	Pro	Ala	Ala	Gln	Asp	Gly	Lys	351
ATG	GAG	ACA	GGT	GAT	GTC	ATT	GTC	TAT	ATT	AAT	GAA	GTT	TGT	GTC	CTT	GGA	1966
Met	Glu	Thr	Gly	Asp	Val	Ile	Val	Tyr	Ile	Asn	Glu	Val	Cys	Val	Leu	Gly	368
CAC	ACT	CAT	GCA	GAT	GTT	GTC	AAA	CTT	TTC	CAG	TCT	GTT	CCT	ATT	GGT	CAG	2017
His	Thr	His	Ala	Asp	Val	Val	Lys	Leu	Phe	Gln	Ser	Val	Pro	Ile	Gly	Gln	385
AGT	GTC	AAC	TTG	GTG	TTG	TGT	CGT	GGC	TAC	CCT	TTG	CCC	TTT	GAC	CCT	GAA	2068
Ser	Val	Asn	Leu	Val	Leu	Cys	Arg	Gly	Tyr	Pro	Leu	Pro	Phe	Asp	Pro	Glu	402
GAT	CCT	GCT	AAC	AGC	ATG	GTG	CCA	CCC	CTT	GCA	ATA	ATG	GAG	AGG	CCA	CCT	2119
Asp	Pro	Ala	Asn	Ser	Met	Val	Pro	Pro	Leu	Ala	Ile	Met	Glu	Arg	Pro	Pro	419

Fig. 4

```
CCG GTG ATG GTC AAT GGA AGA CAT AAC TAT GAA ACA TAC TTG GAA TAC ATT 2170
Pro Val Met Val Asn Gly Arg His Asn Tyr Glu Thr Tyr Leu Glu Tyr Ile  436
TCT CGG ACC TCA CAG TCG GTC CCA GAT ATT ACA GAC CGG CCA CCT CAT TCT 2221
Ser Arg Thr Ser Gln Ser Val Pro Asp Ile Thr Asp Arg Pro Pro His Ser  453
TTG CAC TCC ATG CCA GCT GAC GGC CAG CTA GAT GGC ACG TAT CCA CCA CCC 2272
Leu his Ser Met Pro Ala Asp Gly Gln Leu Asp Gly Thr Tyr Pro Pro Pro  470
GTC CAT GAC GAC AAT GTG TCT ATG GCT TCG TCT GGA GCC ACT CAA GCT GAA 2323
Val His Asp Asp Asn Val Ser Met Ala Ser Ser Gly Ala Thr Gln Ala Glu  487
CTT ATG ACC TTA ACC ATT GTG AAA GGT GCC CAG GGA TTT GGC TTT ACT ATT 2374
Leu Met Thr Leu Thr Ile Val Lys Gly Ala Gln Gly Phe Gly Phe Thr Ile  504
GCC GAC AGT CCC ACG GGA CAG CGG GTG AAA CAA ATC CTT GAC ATT CAG GGA 2425
Ala Asp Ser Pro Thr Gly Gln Arg Val Lys Gln Ile Leu Asp Ile Gln Gly  521
TGC CCT GGG CTG TGT GAA GGA GAC CTC ATT GTT GAG ATC AAC CAA CAG AAT 2476
Cys Pro Gly Leu Cys Glu Gly Asp Leu Ile Val Glu Ile Asn Gln Gln Asn  538
GTA CAG AAC CTG AGC CAT ACA GAA GTA GTG GAT ATA CTT AAG GAC TGC CCC 2527
Val Gln Asn Leu Ser His Thr Glu Val Val Asp Ile Leu Lys Asp Cys Pro  555
```

Fig. 5

```
GTT GGA AGT GAG ACT TCT TTA ATC ATC CAT CGA GGA GGT TTC TTT TCT CCA 2578
Val Gly Ser Glu Thr Ser Leu Ile Ile His Arg Gly Gly Phe Phe Ser Pro  572
TGG AAA ACT CCA AAG CCT ATG ATG GAC CGA TGG GAG AAC CAA GGC AGT CCA 2629
Trp Lys Thr Pro Lys Pro Met Met Asp Arg Trp Glu Asn Gln Gly Ser Pro  589
CAA ACA AGT TTA TCT GCT CCG GCC GTC CCA CAG AAC CTG CCC TTC CCA CCT 2680
Gln Thr Ser Leu Ser Ala Pro Ala Val Pro Gln Asn Leu Pro Phe Pro Pro  606
GCC CTT CAC AGG AGC TCC TTT CCT GAT TCA ACA GAG GCC TTT GAC CCA CGG 2731
Ala Leu His Arg Ser Ser Phe Pro Asp Ser Thr Glu Ala Phe Asp Pro Arg  623
AAG CCT GAC CCA TAT GAG CTC TAC GAG AAA TCG AGA GCC ATT TAT GAA AGT 2782
Lys Pro Asp Pro Tyr Glu Leu Tyr Glu Lys Ser Arg Ala Ile Tyr Glu Ser  640
AGG CAA CAA GTG CCA CCC AGG ACC AGT TTT CGA ATG GAT TCC TCT GGT CCA 2833
Arg Gln Gln Val Pro Pro Arg Thr Ser Phe Arg Met Asp Ser Ser Gly Pro  657
GAT TAT AAG GAA CTG GAT GTT CAC CTT CGG AGG ATG GAG TCT GGA TTT GGC 2884
Asp Tyr Lys Glu Leu Asp Val His Leu Arg Arg Met Glu Ser Gly Phe Gly  674
TTT AGA ATC CTT GGG GGA GAT GAA CCT GGA CAG CCT ATT TTG ATC GGA GCC 2935
Phe Arg Ile Leu Gly Gly Asp Glu Pro Gly Gln Pro Ile Leu Ile Gly Ala  691
```

Fig. 6

```
GTC ATT GCC ATG GGC TCA GCT GAC AGA GAC GGC CGT CTA CAC CCA GGA GAT 2986
Val Ile Ala Met Gly Ser Ala Asp Arg Asp Gly Arg Leu His Pro Gly Asp  708
GAG CTT GTC TAT GTC GAT GGG ATC CCA GTG GCT GGC AAG ACC CAC CGC TAT 3037
Glu Leu Val Tyr Val Asp Gly Ile Pro Val Ala Gly Lys Thr His Arg Tyr  725
GTC ATC GAC CTC ATG CAC CAC GCG GCC CGC AAT GGG CAG GTT AAC CTC ACT 3088
Val Ile Asp Leu Met His His Ala Ala Arg Asn Gly Gln Val Asn Leu Thr  742
GTG AGA AGA AAG GTG CTA TGT GGA GGG GAG CCC TGC CCA GAG AAT GGG AGG 3139
Val Arg Arg Lys Val Leu Cys Gly Gly Glu Pro Cys Pro Glu Asn Gly Arg  759
AGT CCA GGC TCT GTA TCA ACT CAC CAC AGC TCT CCG CGC AGT GAC TAT GCC 3190
Ser Pro Gly Ser Val Ser Thr His His Ser Ser Pro Arg Ser Asp Tyr Ala  776
ACC TAC TCC AAC AGC AAC CAC GCC GCC CCC AGC AGC AAT GCC TCA CCT CCT 3241
Thr Tyr Ser Asn Ser Asn His Ala Ala Pro Ser Ser Asn Ala Ser Pro Pro  793
GAA GGC TTT GCC TCA CAC AGC TTG CAG ACC AGT GAT GTG GTC ATT CAC CGC 3292
Glu Gly Phe Ala Ser His Ser Leu Gln Thr Ser Asp Val Val Ile His Arg  810
AAA GAA AAC GAA GGG TTT GGC TTC GTC ATC ATC AGC TCT CTG AAC AGG CCT 3343
Lys Glu Asn Glu Gly Phe Gly Phe Val Ile Ile Ser Ser Leu Asn Arg Pro  827
```

Fig. 7

Fig. 8

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GAG TCT GGA GCC ACC ATA ACT GTG CCC CAT AAA ATT GGA CGA ATC ATT GAT 3394
Glu Ser Gly Ala Thr Ile Thr Val Pro His Lys Ile Gly Arg Ile Ile Asp  844
GGG AGC CCT GCA GAT CGC TGT GCC AAA CTC AAA GTG GGC GAC CGT ATC TTA 3445
Gly Ser Pro Ala Asp Arg Cys Ala Lys Leu Lys Val Gly Asp Arg Ile Leu  861
GCA GTC AAC GGC CAG TCT ATC ATC AAC ATG CCT CAC GCT GAC ATT GTG AAG 3496
Ala Val Asn Gly Gln Ser Ile Ile Asn Met Pro His Ala Asp Ile Val Lys  878
CTC ATC AAG GAC GCC GGT CTC AGT GTC ACC CTT CGC ATC ATT CCT CAG GAG 3547
Leu Ile Lys Asp Ala Gly Leu Ser Val Thr Leu Arg Ile Ile Pro Gln Glu  895
GAG CTC AAC AGC CCA ACA TCA GCA CCC AGT TCA GAG AAA CAG AGC CCC ATG 3598
Glu Leu Asn Ser Pro Thr Ser Ala Pro Ser Ser Glu Lys Gln Ser Pro Met  912
GCC CAG CAG CAC AGC CCT CTG GCC CAG CAG AGT CCT CTG GCC CAG CCA AGC 3649
Ala Gln Gln His Ser Pro Leu Ala Gln Gln Ser Pro Leu Ala Gln Pro Ser  929
CCC GCC ACC CCC AAC AGC CCA GTC GCA CAG CCA GCT CCT CCC CAA CCT CTC 3700
Pro Ala Thr Pro Asn Ser Pro Val Ala Gln Pro Ala Pro Pro Gln Pro Leu  946
CAG CTG CAA GGA CAC GAA AAT AGT TAC AGG TCA GAA GTT AAA GCG AGG CAA 3751
Gln Leu Gln Gly His Glu Asn Ser Tyr Arg Ser Glu Val Lys Ala Arg Gln  963
```

Fig. 9

GAT GTG AAG CCA GAC ATC CGG CAG CCT CCC TTC ACA GAC TAC AGG CAG CCC 3802
Asp Val Lys Pro Asp Ile Arg Gln Pro Pro Phe Thr Asp Tyr Arg Gln Pro 980
CCG CTG GAC TAC AGG CAG CCC CCG GGA GGA GAC TAC TCA CAG CCC CCA CCC 3853
Pro Leu Asp Tyr Arg Gln Pro Pro Gly Gly Asp Tyr Ser Gln Pro Pro Pro 997
TTG GAC TAC AGG CAG CAC TCT CCA GAC ACC AGG CAG TAC CCT CTG TCA GAC 3904
Leu Asp Tyr Arg Gln His Ser Pro Asp Tyr Arg Gln Tyr Pro Leu Ser Asp 1014
TAC AGG CAG CCA CAG GAT TTT GAT TAT TTC ACT GTG GAC ATG GAG AAA GGA 3955
Tyr Arg Gln Pro Gln Asp Phe Asp Tyr Phe Thr Val Asp Met Glu Lys Gly 1031
GCC AAA GGA TTT GGA TTC AGC ATT CGT GGA GGA AGG GAA TAC AAG ATG GAT 4006
Ala Lys Gly Phe Gly Phe Ser Ile Arg Gly Gly Arg Glu Tyr Lys Met Asp 1048
CTG TAT GTG TTG AGA TTG GCA GAG GAT GGG CCA GCC ATA AGG AAC GGC AGG 4057
Leu Tyr Val Leu Arg Leu Ala Glu Asp Gly Pro Ala Ile Arg Asn Gly Arg 1065
ATG AGG GTA GGA GAT CAG ATC ATT GAA ATA AAT GGG GAA AGC ACA CGA GAC 4108
Met Arg Val Gly Asp Gln Ile Ile Glu Ile Asn Gly Glu Ser Thr Arg Asp 1082
ATG ACC CAC GCC AGA GCA ATA GAA CTC ATC AAG TCT GGA GGA AGA AGA GTG 4159
Met Thr His Ala Arg Ala Ile Glu Leu Ile Lys Ser Gly Gly Arg Arg Val 1099

Fig. 10

```
CGG CTG CTG CTG AAG AGA GGC ACG GGG CAG GTC CCG GAG TAT GGA ATG GTA 4210
Arg Leu Leu Leu Lys Arg Gly Thr Gly Gln Val Pro Glu Tyr Gly Met Val 1116
CCT TCC AGC CTC TCC ATG TGC AAA AGT GAC AAG CAT GGG TCC CCA TAT 4261
Pro Ser Ser Leu Ser Met Cys Lys Met Lys Asp Lys His Gly Ser Pro Tyr 1133
TTC TAC TTA CTG GGC CAC CCT AAA GAC ACG ACG AAC CCC ACG CCT GGA GTG 4312
Phe Tyr Leu Leu Gly His Pro Lys Asp Thr Thr Asn Pro Thr Pro Gly Val 1150
CTG CCG CTG CCG CCC CAG GCC TGC CGG AAG TAGGCGTCTCCCTCGAAGACATC 4368
Leu Pro Leu Pro Pro Pro Gln Ala Cys Arg Lys 1161
CTCTCTCCATTCTCTCCATCACATCCAGCCCCACCCTCCGACCCTTCCCACCAGATAGGC 4428
CCAGACCCAACTTGGGATATCCAAAGGGAACACGACGTTAGGAAACCAAAGGAGCTTTCG 4488
GCCGGCGGCCAGAAGAAGCAGCGCCTGGGGGAGCAGAGGGAGCGCTCGGCGAGCCCGCAG 4548
CGCAGTGCGCGGCCCAGGCTGGAGGAGGTGCCCGGCGGCCAGGGGCGGCCCGAGGCCGGC 4608
AGGCCCGCCTCGGAGGCGGCCGACGGGAAGGAGGCGCTGCGCGGCCGGCGTGAGGGCCTC 4668
GGGGCCGCGGGGCGCGCGGGAGGCCGAGGCCAAGGTGGGTGTGCGCTCGGGGGGCCCGACCC 4728
GCAGCGCGGCCCACGGGGGCGGCCCAGCGCGCAAGGCGACGATGGCGCCGGGGGCCCTGG 4788
AAGGTGCCGGGCTCCGACACAAGCTGCCGGGCGCCCTGCAGCCTGGCGCCTCGGCGCGGGC 4848
```

Fig. 11

AGATGAGCCCCAAGGCGAGGGGCCCCCGCCCCTCCACGCAGGCCGATCTTCCTGGGTT	4908
CCGTCTCACGGCGTTTTAATTTATTTCCACTGTCACACGCATAGATCTATACGAGGCGCC	4968
GAAGCCCGGGAGCGCCGGCGTGCGACGCGCGTAGGCGGCACGGTGTGCGCGCAGG	5028
CAGACCTAAACTGATCCTAAAGCCCCCGGTTCCATGGTGGGAGCTTTGGCAGCTACGGAA	5088
GAACCAAAATCACGCAAACATCACAGAGACAGTGCAGTGTAGCTTTAGATTCAAAAAA	5148
AAAAAAA	5156

Fig. 12

```
TCGCCGCCACGACGCGCCCAGCACCTCCGAGCGACTGACCGACCTCCACGCGCGTCCCGA    60
ACACACTGCCACCGCCGCCGCCGCGCGCTCGCGCCGCACTCCCTCGCACGTCACC    120
ACGTGCGCTGCCGCCAACGCCTCCCGGCCGCTTCCGGCTCTGATGCCTGAGCGAATCACA    180
GGCGAGCTCCCGGGAAGATCCCGCTCTGAGGCTCCGCCCCCGGACAGGGCCCCGCCCACC    240
TCATAGCTCTTTTCCTCAGCCGCCCCCTCCTTCCTTCTCGGCTCAACTAGGTCAGCGCAA    300
GGTGATCCCGGAGAGCGGGGCGGCGGGGACCGCTCCTCCTGTTACTTATCGAGCGCGCGC    360
TCCCTCCCGAGCCTCACACCCTCGCTTCGCCCTTTTTTTCCACTGTCCAGGAACTGGTT    420
CCCTCCTTCCTCTTCCACCTGCCCTACCTTCTCCAGAGATCCGACGTGGCGATTAGAGTT    480
CTCAGCGTCACACTGACTTCTAGGCAACTAGCCTAGACTGGAGCTGCGTGTTGTGGGAAC    540
CCCGCGGCAGTAGTTGAGCATCAGGCTCTTACCTTGGAGGTGGAGGGGTGAGAAGAATAG    600
AGGAAGAAGGGATAAGTCAGAGGAGGGCCTGAACAACTAGCCCCTCTATTGGCCTGCTTT    660
GGGTGAGCATTCAGTGAGTGTGTTTAAAAAAAAAAGGGAGGGAAAACAAAAGACCTCAG    720
GAGCAGTTTTGTGTTGCTGTGTCTGGCTTCAAGAAGAAAATTCTAGACATTTATGCCGGC    780
AAGACCAAAGCTCAGCTAAGACTACTTCTCCCAAGAAGATAATTGTATCAGAGGATGGGT    840
TGGATCAGTACAGGTGGTTTGAGGAGACGCTGACAGAGGACCATGGAAAGGTGGGAGAGG    900
ACGCGCGGCTCCTGGGCTTCCTCTGAGCTCAGCTCCAGGCACCACAAGGCCACATAAGGA    960
```

Fig. 13

```
GGGTGAGGTCCCTGGAGTGGACTACATTTCATAACCGTTGAGGAGTTT ATG GAA TTG GAG   1021
                                                  Met Glu Leu Glu      4

AAA AGT GGT GCT CTC CTA GAA AGC GGG ACC TAT GAA GAC AAC TAC TAC GGT 1072
Lys Ser Gly Ala Leu Leu Glu Ser Gly Thr Tyr Glu Asp Asn Tyr Tyr Gly  21

ACC CCG AAG CCT CCA GCT GAA CCA GCA CCA TTA TTA AAT GTA ACA GAC CAG 1123
Thr Pro lys Pro Pro Ala Glu Pro Ala Pro Leu Leu Asn Val Thr Asp Gln  38

ATA CTT CCG GGA GCT ACT CCA AGT GCT GAG GGG AAG CGG AAA AGA AAT AAG 1174
Ile Leu Pro Gly Ala Thr Pro Ser Ala Glu Gly Lys Arg Lys Arg Asn Lys  55

TCA GTG ACC AAC ATG GAG AAA GCA AGT ATA GAG CCT CCA GAG GAG GAA GAA 1225
Ser Val Thr Asn Met Glu Lys Ala Ser Ile Glu Pro Pro Glu Glu Glu Glu  72

GAA GAA AGG CCT GTA GTC AAT GGA AAC GGC GTG GTC ATA ACC CCA GAA TCC 1276
Glu Glu Arg Pro Val Val Asn Gly Asn Gly Val Val Ile Thr Pro Glu Ser  89

AGT GAA CAT GAA GAC AAA AGT GCA GGT GCC TCA GGG GAG ACA CCC TCC CAG 1327
Ser Glu His Glu Asp Lys Ser Ala Gly Ala Ser Gly Glu Thr Pro Ser Gln 106

CCT TAC CCT GCA CCC GTG TAC AGC CAG CCC GAA GAG CTC AAG GAC CAG ATG 1378
Pro Tyr Pro Ala Pro Val Tyr Ser Gln Pro Glu Glu Leu Lys Asp Gln Met 123
```

Fig. 14

```
GAC GAT ACA AAG CCA ACA AAG CCT GAG GAG AAC GAG GAC TCT GAT CCA TTG 1429
Asp Asp Thr Lys Pro Thr Lys Pro Glu Glu Asn Glu Asp Ser Asp Pro Leu  140
CCT GAT AAC TGG GAA ATG GCC TAC ACA GAG AAG GGG GAA GTC TAC TTC ATT 1480
Pro Asp Asn Trp Glu Met Ala Tyr Thr Glu Lys Gly Glu Val Tyr Phe Ile  157
GAC CAT AAC ACA AAG ACA ACA TCA TGG CTG GAT CCG CGA CTT GCG AAA AAG 1531
Asp His Asn Thr Lys Thr Thr Ser Trp Leu Asp Pro Arg Leu Ala Lys Lys  174
GCT AAA CCT CCA GAA GAG TGC AAA GAA AAT GAG CTT CCA TAT GGC TGG GAA 1582
Ala Lys Pro Pro Glu Glu Cys Lys Glu Asn Glu Leu Pro Tyr Gly Trp Glu  191
AAA ATC GAT GAT CCT ATA TAT GGC ACT TAC TAT GTT GAC CAC ATA AAT AGA 1633
Lys Ile Asp Asp Pro Ile Tyr Gly Thr Tyr Tyr Val Asp His Ile Asn Arg  208
AGA ACA CAG TTT GAA AAC CCT GTC CTG GAA GCA AAA AGG AAG CTA CAG CAA 1684
Arg Thr Gln Phe Glu Asn Pro Val Leu Glu Ala Lys arg Lys Leu Gln Gln  225
CAT AAC ATG CCC CAC ACA GAA CTT GGA GCA AAG CCC CTG CAG GCC CCA GGT 1735
His Asn Met Pro His Thr Glu Leu Gly Ala Lys Pro Leu Gln Ala Pro Gly  242
TTC CGA GAA AAG CCA CTC TTC ACC CGG GAT GCA TCC CAG TTG AAG GGA ACG 1786
Phe Arg Glu Lys Pro Leu Phe Thr Arg Asp Ala Ser Gln Leu Lys Gly Thr  259
```

Fig. 15

```
TTC CTC AGC ACC ACC CTC AAA AAG AGC AAC ATG GGC TTT GGG TTT ACC ATA 1837
Phe Leu Ser Thr Thr Leu Lys Lys Ser Asn Met Gly Phe Gly Phe Thr Ile 276
ATT GGT GGA GAC GAG CCG GAT GAG TTT CTA CAG GTG AAA AGT GTG ATC CCG 1888
Ile Gly Gly Asp Glu Pro Asp Glu Phe Leu Gln Val Lys Ser Val Ile Pro 293
GAT GGG CCT GCC GCA CAG GAT GGG AAA ATG GAG ACA GGT GAT GTC ATT GTC 1939
Asp Gly Pro Ala Ala Gln Asp Gly Lys Met Glu Thr Gly Asp Val Ile Val 310
TAT ATT AAT GAA GTT TGT GTC CTT GGA CAC ACT CAT GCA GAT GTT GTC AAA 1990
Tyr Ile Asn Glu Val Cys Val Leu Gly His Thr His Ala Asp Val Val Lys 327
CTT TTC CAG TCT GTT CCT ATT GGT CAG AGT GTC AAC TTG GTG TTG TGT CGT 2041
Leu Phe Gln Ser Val Pro Ile Gly Gln Ser Val Asn Leu Val Leu Cys Arg 344
GGC TAC CCT TTG CCC TTT GAC CCT GAA GAT CCT GCT AAC AGC ATG GTG CCA 2092
Gly Tyr Pro Leu Pro Phe Asp Pro Glu Asp Pro Ala Asn Ser Met Val Pro 361
CCC CTT GCA ATA ATG GAG AGG CCA CCT CCG GTG ATG GTC AAT GGA AGA CAT 2143
Pro Leu Ala Ile Met Glu Arg Pro Pro Pro Val Met Val Asn Gly Arg His 378
AAC TAT GAA ACA TAC TTG GAA TAC ATT TCT CGG ACC TCA CAG TCG GTC CCA 2194
Asn Tyr Glu Thr Tyr Leu Glu Tyr Ile Ser Arg Thr Ser Gln Ser Val Pro 395
```

Fig. 16

```
GAT ATT ACA GAC CGG CCA CCT CAT TCT TTG CAC TCC ATG CCA GCT GAC GGC 2245
Asp Ile Thr Asp Arg Pro Pro His Ser Leu his Ser Met Pro Ala Asp Gly  412
CAG CTA GAT GGC ACG TAT CCA CCC GTC CAT GAC GAC AAT GTG TCT ATG 2296
Gln Leu Asp Gly Thr Tyr Pro Pro Val His Asp Asp Asn Val Ser Met  429
GCT TCG TCT GGA GCC ACT CAA GCT GAA CTT ATG ACC TTA ACC ATT GTG AAA 2347
Ala Ser Ser Gly Ala Thr Gln Ala Glu Leu Met Thr Leu Thr Ile Val Lys  446
GGT GCC CAG GGA TTT GGC TTT ACT ATT GCC GAC AGT CCC ACG GGA CAG CGG 2398
Gly Ala Gln Gly Phe Gly Phe Thr Ile Ala Asp Ser Pro Thr Gly Gln Arg  463
GTG AAA CAA ATC CTT GAC ATT CAG GGA TGC CCT GGG CTG TGT GAA GGA GAC 2449
Val Lys Gln Ile Leu Asp Ile Gln Gly Cys Pro Gly Leu Cys Glu Gly Asp  480
CTC ATT GTT GAG ATC AAC CAA CAG AAT GTA CAG AAC CTG AGC CAT ACA GAA 2500
Leu Ile Val Glu Ile Asn Gln Gln Asn Val Gln Asn Leu Ser His Thr Glu  497
GTA GTG GAT ATA CTT AAG GAC TGC CCC GTT GGA AGT GAG ACT TCT TTA ATC 2551
Val Val Asp Ile Leu Lys Asp Cys Pro Val Gly Ser Glu Thr Ser Leu Ile  514
ATC CAT CGA GGA GGT TTC TTT TCT CCA TGG AAA ACT CCA AAG CCT ATG ATG 2602
Ile His Arg Gly Gly Phe Phe Ser Pro Trp Lys Thr Pro Lys Pro Met Met  531
```

Fig. 17

GAC CGA TGG GAG AAC CAA GGC AGT CCA CAA ACA AGT TTA TCT GCT CCG GCC 2653
Asp Arg Trp Glu Asn Gln Gly Ser Pro Gln Thr Ser Leu Ser Ala Pro Ala 548
GTC CCA CAG AAC CTG CCC TTC CCA CCT GCC CTT CAC AGG AGC TCC TTT CCT 2704
Val Pro Gln Asn Leu Pro Phe Pro Pro Ala Leu His Arg Ser Ser Phe Pro 565
GAT TCA ACA GAG GCC TTT GAC CCA CGG AAG CCT GAC CCA TAT GAG CTC TAC 2755
Asp Ser Thr Glu Ala Phe Asp Pro Arg Lys Pro Asp Pro Tyr Glu Leu Tyr 582
GAG AAA TCG AGA GCC ATT TAT GAA AGT AGG CAA CAA GTG CCA CCC AGG ACC 2806
Glu Lys Ser Arg Ala Ile Tyr Glu Ser Arg Gln Gln Val Pro Pro Arg Thr 599
AGT TTT CGA ATG GAT TCC TCT GGT CCA GAT TAT AAG GAA CTG GAT GTT CAC 2857
Ser Phe Arg Met Asp Ser Ser Gly Pro Asp Tyr Lys Glu Leu Asp Val His 616
CTT CGG AGG ATG GAG TCT GGA TTT GGC TTT AGA ATC CTT GGG GGA GAT GAA 2908
Leu Arg Arg Met Glu Ser Gly Phe Gly Phe Arg Ile Leu Gly Gly Asp Glu 633
CCT GGA CAG CCT ATT TTG ATC GGA GCC GTC ATT GCC ATG GGC TCA GCT GAC 2959
Pro Gly Gln Pro Ile Leu Leu Ile Gly Ala Val Ile Ala Met Gly Ser Ala Asp 650
AGA GAC GGC CGT CTA CAC CCA GGA GAT GAG CTT GTC TAT GTC GAT GGG ATC 3010
Arg Asp Gly Arg Leu His Pro Gly Asp Glu Leu Val Tyr Val Asp Gly Ile 667

Fig. 18

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CCA GTG GCT GGC AAG ACC CAC CGC TAT GTC ATC GAC CTC ATG CAC CAC GCG 3061
Pro Val Ala Gly Lys Thr His Arg Tyr Val Ile Asp Leu Met His His Ala  684
GCC CGC AAT GGG CAG GTT AAC CTC ACT GTG AGA AGA AAG GTG CTA TGT GGA 3112
Ala Arg Asn Gly Gln Val Asn Leu Thr Val Arg Arg Lys Val Leu Cys Gly  701
GGG GAG CCC TGC CCA GAG AAT GGG AGG AGT CCA GGC TCT GTA TCA ACT CAC 3163
Gly Glu Pro Cys Pro Glu Asn Gly Arg Ser Pro Gly Ser Val Ser Thr His  718
CAC AGC TCT CCG CGC AGT GAC TAT GCC ACC TAC TCC AAC AGC AAC CAC GCC 3214
His Ser Ser Pro Arg Ser Asp Tyr Ala Thr Tyr Ser Asn Ser Asn His Ala  735
GCC CCC AGC AGC AAT GCC TCA CCT CCT GAA GGC TTT GCC TCA CAC AGC TTG 3265
Ala Pro Ser Ser Asn Ala Ser Pro Pro Glu Gly Gly Phe Ala Ser His Ser Leu  752
CAG ACC AGT GAT GTG GTC ATT CAC CGC AAA GAA AAC GAA GGG TTT GGC TTC 3316
Gln Thr Ser Asp Val Val Ile His Arg Lys Glu Asn Glu Gly Phe Gly Phe  769
GTC ATC ATC AGC TCT CTG AAC AGG CCT GAG TCT GGA GCC ACC ATA ACT GTG 3367
Val Ile Ile Ser Ser Leu Asn Arg Pro Glu Ser Gly Ala Thr Ile Thr Val  786
CCC CAT AAA ATT GGA CGA ATC ATT GAT GGG AGC CCT GCA GAT CGC TGT GCC 3418
Pro His Lys Ile Gly Arg Ile Ile Asp Gly Ser Pro Ala Asp Arg Cys Ala  803
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AAA CTC AAA GTG GGC GAC CGT ATC TTA GCA GTC AAC GGC CAG TCT ATC ATC 3469
Lys Leu Lys Val Gly Asp Arg Ile Leu Ala Val Asn Gly Gln Ser Ile Ile  820
AAC ATG CCT CAC GCT GAC ATT GTG AAG CTC ATC AAG GAC GCC GGT CTC AGT 3520
Asn Met Pro His Ala Asp Ile Val Lys Leu Ile Lys Asp Ala Gly Leu Ser  837
GTC ACC CTT CGC ATC ATT CCT CAG GAG GAG CTC AAC AGC CCA ACA TCA GCA 3571
Val Thr Leu Arg Ile Ile Pro Gln Glu Glu Leu Asn Ser Pro Thr Ser Ala  854
CCC AGT TCA GAG AAA CAG AGC CCC ATG GCC CAG CAG CAC AGC CCT CTG GCC 3622
Pro Ser Ser Glu Lys Gln Ser Pro Met Ala Gln Gln His Ser Pro Leu Ala  871
CAG CAG AGT CCT CTG GCC CAG CCA AGC CCC GCC ACC CCC AAC AGC CCA GTC 3673
Gln Gln Ser Pro Leu Ala Gln Pro Ser Pro Ala Thr Pro Asn Ser Pro Val  888
GCA CAG CCA GCT CCT CCC CAA CCT CTC CAG CTG CAA GGA CAC GAA AAT AGT 3724
Ala Gln Pro Ala Pro Pro Gln Pro Leu Gln Leu Gln Gly His Glu Asn Ser  905
TAC AGG TCA GAA GTT AAA GCG AGG CAA GAT GTG AAG CCA GAC ATC CGG CAG 3775
Tyr Arg Ser Glu Val Lys Ala Arg Gln Asp Val Lys Pro Asp Ile Arg Gln  922
CCT CCC TTC ACA GAC TAC AGG CAG CCC CCG CTG GAC TAC AGG CAG CCC CCG 3826
Pro Pro Phe Thr Asp Tyr Arg Gln Pro Pro Leu Asp Tyr Arg Gln Pro Pro  939
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Fig. 19

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GGA GGA GAC TAC TCA CAG CCC CCA CCC TTG GAC TAC AGG CAG CAC TCT CCA 3877
Gly Gly Asp Tyr Ser Gln Pro Pro Pro Leu Asp Tyr Arg Gln His Ser Pro  956
GAC ACC AGG CAG TAC CCT CTG TCA GAC TAC AGG CAG CCA CAG GAT TTT GAT 3928
Asp Tyr Arg Gln Tyr Pro Leu Ser Asp Tyr Arg Gln Pro Gln Asp Phe Asp  973
TAT TTC ACT GTG GAC ATG GAG AAA GGA GCC AAA GGA TTT GGA TTC AGC ATT 3979
Tyr Phe Thr Val Asp Met Glu Lys Gly Ala Lys Gly Phe Gly Phe Ser Ile  990
CGT GGA GGA AGG GAA TAC AAG ATG GAT CTG TAT GTG TTG AGA TTG GCA GAG 4030
Arg Gly Gly Arg Glu Tyr Lys Met Asp Leu Tyr Val Leu Arg Leu Ala Glu 1007
GAT GGG CCA GCC ATA AGG AAC GGC AGG ATG AGG GTA GGA GAT CAG ATC ATT 4081
Asp Gly Pro Ala Ile Arg Asn Gly Arg Met Arg Val Gly Asp Gln Ile Ile 1024
GAA ATA AAT GGG GAA AGC ACA CGA GAC ATG ACC CAC GCC AGA GCA ATA GAA 4132
Glu Ile Asn Gly Glu Ser Thr Arg Asp Met Thr His Ala Arg Ala Ile Glu 1041
CTC ATC AAG TCT GGA GGA AGA AGA GTG CGG CTG CTG CTG AAG AGA GGC ACG 4183
Leu Ile Lys Ser Gly Gly Arg Arg Val Arg Leu Leu Leu Lys Arg Gly Thr 1058
GGG CAG GTC CCG GAG TAT GGA ATG GTA CCT TCC AGC CTC TCC ATG TGC ATG 4234
Gly Gln Val Pro Glu Tyr Gly Met Val Pro Ser Ser Leu Ser Met Cys Met 1075
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Fig. 20

Fig. 21

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AAA AGT GAC AAG CAT GGG TCC CCA TAT TTC TAC TTA CTG GGC CAC CCT AAA 4285
Lys Ser Asp Lys His Gly Ser Pro Tyr Phe Tyr Leu Leu Gly His Pro Lys 1092
GAC ACG ACG AAC CCC ACG CCT GGA GTG CTG CCG CTG CCG CCC CAG GCC 4336
Asp Thr Thr Asn Pro Thr Pro Gly Val Leu Pro Leu Pro Pro Pro Gln Ala 1109
TGC CGG AAG TAGGCGTCTCCCTCGAAGACATCCTCTCTCCATTCTCTCCATCACATCCAGCCCCC 4400
Cys Arg Lys                                                    1112
ACCCTCCGACCCTTCCCACCAGATAGGCCCAGACCCAACTTGGGATATCCAAAGGGAACA 4460
CGACGTTAGGAAACCAAAGGAGCTTTCGGCCGGCGGCCAGAAGAAGCAGCGCCTGGGGGA 4520
GCAGAGGGAGCGCTCGGCGAGCCCGCAGCGCAGTGCCGCGGCCCAGGCTGGAGGAGGTGCC 4580
CGGCGGCCAGGGGCGGCCCGAGGCCGGCAGGCCGCCTCGGAGGCGGCCGACGGGAAGGA 4640
GGCGCTGCGCGGCCGGCGTGAGGGCCTCGGGGCCGCGCGGGAGGCCGAGGCCAA 4700
GGTGGGTGTGCGCTCGGGGGCCCGACCCGCAGCGCGGCCCACGGGGGGCGGCCCAGCGCG 4760
CAAGGCGACGATGGCGCCGGGGCCCTGGAAGGTGCCGGGCTCCGACAAGCTGCCGGGCGC 4820
CCTGCAGCCTGGCGCCTCGGCCGCGGGCAGATGAGCCCCAAGGCGAGGGGCCCCCGCCCG 4880
CCTCCACGCAGGCCGATCTTCCTGGGTTCCGTCTCACGGCGTTTTAATTTATTTCCACTG 4940
TCACACGCATAGATCTATACGAGGCGCCGAAGCCCGGGAGCGCCGGCGTGCGACGCGCGT 5000
```

Fig. 22

AGGCGGCACGGCACGGTGTGCGCGCAGGCAGACCTAAACTGATCCTAAAGCCCCCGGTTC 5060

CATGGTGGGAGCTTTGGCAGCTACGGAAGAACCAAAATCACGCAAACATCACAGAGAGAC 5120

AGTGCAGTGTAGCTTTAGATTCAAAAAAAAAAAAA 5156

Fig. 23

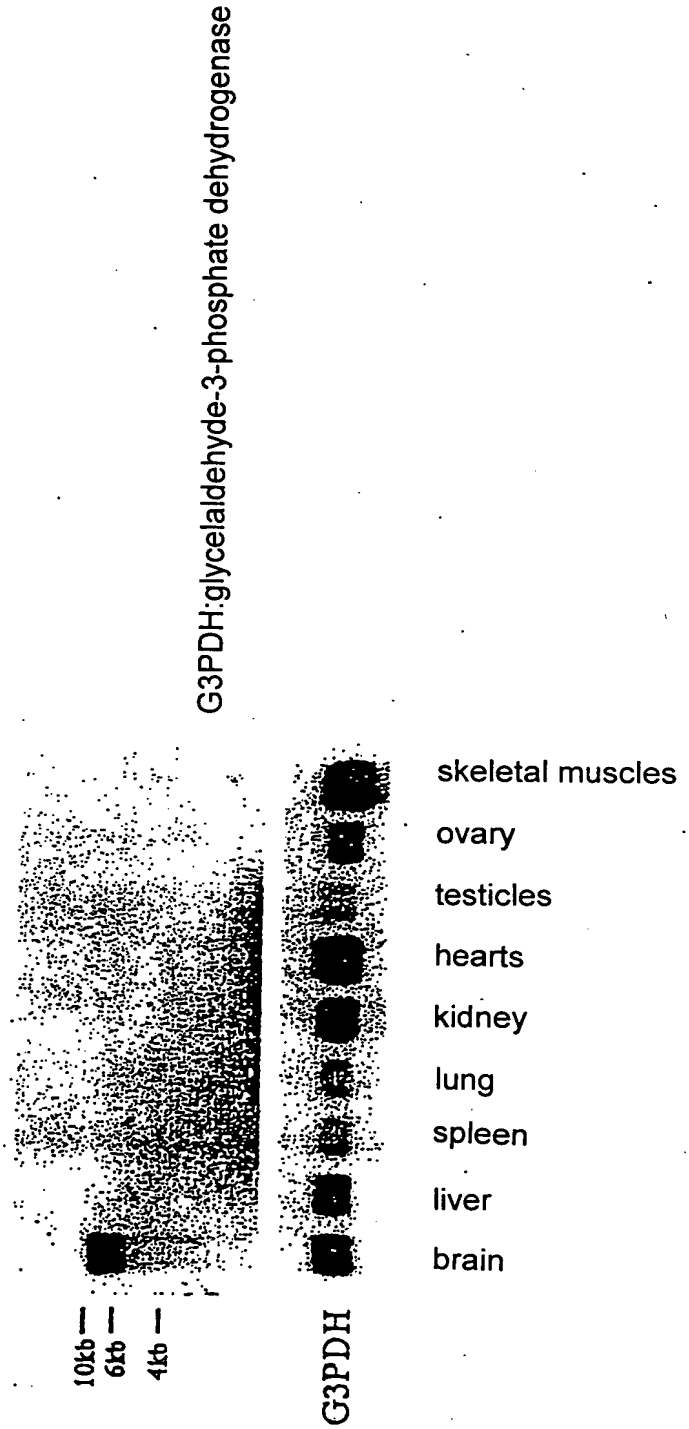
G3PDH:glycelaldehyde-3-phosphate dehydrogenase
skeletal muscles
ovary
testicles
hearts
kidney
lung
spleen
liver
brain
10kb
6kb
4kb
G3PDH

Fig. 24